

Table S5. Sequence information for *S. mediterranea* prohormone genes (listed alphabetically)

Gene Name: <i>Smed-1020HH-1</i>	Abbreviation: <i>Smed-1020HH-1</i>
Prohormone Sequence: MNLKIFFILLIGIFVTCVTSYLSGDTSLENFDDLESNSDYMKRYSYLKGGIRWKKPNYRNNRYLKGG IRWKRRNYLKGLRF	
Signal Sequence: MNLKIFFILLIGIFVTCVTS	
Predicted Peptide(s): YLSGDTSLENFDDLESNSDYM ^o , YSYLKGGIRW ^o , PNYRNNRYLKGGIRW, NYLKGLRF	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): TTTGAAGATGAATTTGAAAATTT (OUTER)	
Asexual Expression Pattern: CG, pharynx, VNC, ring of cells anterior to CG	
Genbank accession: GU295180	

Gene Name: <i>Smed-1020HH-2</i>	Abbreviation: <i>Smed-1020HH-2</i>
Prohormone Sequence: MIMKTVIVFFISVLLYGLLSISEAVPRSAENLRTYDSLLEELNDYDPIYKRQSYLTGGIRYKKQVPGK RYLTGGIRY	
Signal Sequence: MIMKTVIVFFISVLLYGLLSISEA	
Predicted Peptide(s): VPRSAENLRTYDSLLEELNDYDPIY, QSYLTGGIRY, pQSYLTGGIRY, QVPamide, QVPG, YLTGGIRY	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): ATGATAATGAAAAGTGTAAATAGTA (OUTER), TTTTTCATAAGCGTTCTCTTATACGG (INNER)	
Asexual Expression Pattern: CG (concentration in lateral region), VNCs, unidentified sub- epidermal cells, cells surrounding pharynx	
Genbank accession: BK007025	

Gene Name: <i>Smed-cerebral peptide prohormone Like-1</i>	Abbreviation: <i>Smed-cpp-1</i>
Prohormone Sequence: MNFTNRPWTCGTLILILSITFCVGLLEGDDTFVTFQEILRNGKPDLLSDNQDNQKVISFYKSKRVPG WGKRSYQWIKKTPGWGKRTYQWSKTPGWG	
Signal Sequence: MNFTNRPWTCGTLILILSITFCVG	
Predicted Peptide(s): LEGEDDTFVTFQEILRNamide, LEGEDDTFVTFQEILRNG, PDLLSDNQDNQKVISFYKS, VPGWamide, VPGWG, SYQWI, TPGWamide (x2), TPGWG(x2), TYQWS	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): TGAATTTTACGAATAGACCTTGGA (OUTER), CCTTGGACTTGTGGGACATT (INNER)	
Asexual Expression Pattern: CG (lateral cells), unidentified cells between VNCs in anterior half of animal	
Genbank accession: BK007012	

Gene Name: <i>Smed-eye53-1</i>	Abbreviation: <i>Smed-eye53-1</i>
Prohormone Sequence: MNLVPILTILCSLCLWLPRNADSMQKLSIPTYWDDIDTSKRNAKRLSVPTYFDDWESRKKRSS AGKRLSVPPYWDEWESQRR	
Signal Sequence: MNLVPILTILCSLCLWLPRNADS	

Predicted Peptide(s): MSMQ, LSIPTYWDDIDTS , NA, LSVPTYFDDWESR , SSAamide, SSAG, LSVPPYWDEWESQ
Prohormone Cloning Method: EST PL05009A1G02, Contig6690
Oligonucleotide Primer(s): N/A
Asexual Expression Pattern: CG, VNC, photoreceptors, small cells near anterior margin, pharynx, lateral stripes of cells (ventral)
Genbank accession: BK007033

Gene Name: <i>Smed-eye53-2</i>	Abbreviation: <i>Smed-eye53-2</i>
Prohormone Sequence: MIIALVSAVIIGLTQGEYRSSKNSGRNDWSLLKSSHIKRALVPDAWDDWEIKRSEHKKRAVVPDAWDDWEIKRAI	
Signal Sequence: MIIALVSAVIIGLTQG	
Predicted Peptide(s): EYRSSKNSGRNDWSLLKSSHI, ALVPDAWDDWEI, SEH, AVVPDAWDDWEI [Ⓢ] , AI	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): GCGTGATGATAATAGCATTGG (Outer), AATAGCATTGGTATCAGCAGTGA(Inner)	
Asexual Expression Pattern: CG, VNC, unidentified sub-epidermal cells, pharynx, photoreceptors	
Genbank accession: BK007024	

Gene Name: <i>Smed-gonadotropin releasing hormone like-1</i>	Abbreviation: <i>Smed-grh-1</i>
Prohormone Sequence: MTKFVRRFFIILFIFLQIVSEICPQSYHFSNDWLP GKRYHTGHQMFRLKKG FHYFRLKKPSNCIFDNYFKQDILKLARKHSGLCPSDLSFIEELQNIK	
Signal Sequence: MTKFVRRFFIILFIFLQIVS or MTKFVRRFFIILFIFLQIVSEICP	
Predicted Peptide(s): EICPQSYHFSNDWLPamide, EICPQSYHFSNDWLP, YHTGHQMFRL, GFHYFRL, PSNCIFDNYFKQDILKLARKHSGLCPSDLSFIEELQNIK	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): (Outer)	
Asexual Expression Pattern: CG, VNC, pharynx	
Genbank accession: GU295185	

Gene Name: <i>Smed-insulin like prohormone-1</i>	Abbreviation: <i>Smed-ilp-1</i>
Prohormone Sequence: MLKMYFAFYLVVLYIQFYSGEIFKYELYNQSQADLERNLEVRFCQHRLKAITTL CNNVNINYL RHF FANRTNIMHPIYKYVIRPELLSMASIGRYSPESINC NAYK KSLVDECCCKSCTMLNLFKYCPSDDEARSLKFIK	
Signal Sequence: MLKMYFAFYLVVLYIQFYSG	
Predicted Peptide(s): EIFKYELYNQSQADLERNLEVR FCQHRL [Ⓢ] , AITTL C NN VNINYL RHF FANRTNIMHPIYKYVIRPELLSMASIGRY YSPESINC NAY [Ⓢ] , SLVDECCCKSCTMLNLFKYCPSDDEARSL, FIK	
Prohormone Cloning Method: EST PL05016A1H10, Contig3473	
Oligonucleotide Primer(s): N/A	
Asexual Expression Pattern: CG, VNC	
Genbank accession: BK007034	

Gene Name: <i>Smed-myomodulin prohormone like-1</i>	Abbreviation: <i>Smed-mpl-1</i>
Prohormone Sequence: MSKLT YFIFMIMLFIFVQTIDINSNQYEEDYDPNDDHELDKRAYRLMRMGKRAVRLMRMGKKAVRLMRLGKRSDMA	
Signal Sequence: MSKLT YFIFMIMLFIFVQT	
Predicted Peptide(s): IDINSNQYEEDYDPNDDHELD, AYRLMRMamide, AYRLMRMG, AVRLMRMamide, AVRLMRMG , AVRLMRLamide , AVRLMRLG , SDMA	
Prohormone Cloning Method: Amplified from cDNA	
Oligonucleotide Primer(s): TTTTCATGATAATGCTCTTCATTTT (Forward), TGCCATATCGCTTCTTTTACC (Reverse)	
Asexual Expression Pattern: CG, VNCs, cells surrounding pharynx	
Genbank accession: BK007017	

Gene Name: <i>Smed-myomodulin prohormone like-2</i>	Abbreviation: <i>Smed-mpl-2</i>
Prohormone Sequence: MQYLFAAFIFMAYYIRCEDFNENIYPELFEDESEQYNAIPWNKRAVRLMRLGKRIAPLKRAVKLMRLGKREE	
Signal Sequence: MQYLFAAFIFMAYYIRC	
Predicted Peptide(s): EDFNENIYPELFEDESEQYNAIPWN, AVRLMRLamide , AVRLMRLG , IAPL, AVKLMRLamide, AVKLMRLG^s , EE	
Prohormone Cloning Method: Amplified from cDNA	
Oligonucleotide Primer(s): TGCAATATTTATTTGCAGCTTTC (Forward), CGTTAAATAAAATTCGATTATTCCTC (Reverse)	
Asexual Expression Pattern: CG, PR, pharynx (at base and within), VNCs, marginal adhesive gland cells	
Genbank accession: BK007016	

Gene Name: <i>Smed-neuropeptide precursor-1</i>	Abbreviation: <i>Smed-npp-1</i>
Prohormone Sequence: MKLEIRIVVVTVLLSAVLADYYNSDDSDSKKRSFVRLGKRASFVRLGRSGYEWQSPFVKKASFVRLGKKSRLDYEPVDDYNKRASFVRLGRTYE	
Signal Sequence: MKLEIRIVVVTVLLSAVLA	
Predicted Peptide(s): DYYNSDDSDS, SFVRLamide, SFVRLG, ASFVRLamide (x3) , ASFVRLG (x3) , SGYEWQSPFV, SRLDYEPVDDYN , TYE	
Prohormone Cloning Method: EST PL04023B1E01, Contig3553	
Oligonucleotide Primer(s): N/A	
Asexual Expression Pattern: pharynx	
Genbank accession: BK007036	

Gene Name: <i>Smed-neuropeptide precursor-2</i>	Abbreviation: <i>Smed-npp-2</i>
Prohormone Sequence: MIFQFLLLL FVTTVWTDSDSDCDICEICEAGGLMDSTECCLSSVLYKICESKLEISRDKRRGLIGKR RGLIGKRRGLIGKRRGLIGKRRGLIGKRRGLIGKRQLLNSKQSIFQDEY	
Signal Sequence: MIFQFLLLL FVTTVWT	
Predicted Peptide(s): DSDSDCDICEICEAGGLMDSTECCLSSVLYKICESKLEISRD, RGLIamide or GLIamide (x7), RGLIG or GLIG (x7), QLLNSKQSIFQDEY, pQLLNSKQSIFQDEY	

Prohormone Cloning Method: EST PL05001B1G10, Contig194
Oligonucleotide Primer(s): N/A
Asexual Expression Pattern: CG, VNC, pharynx, unidentified sub-epidermal cells
Genbank accession: BK007035

Gene Name: <i>Smed-neuropeptide precursor-3</i>	Abbreviation: <i>Smed-npp-3</i>
Prohormone Sequence: MMAKQFPYFIINLSIVLCLCFYIQFADQMPDQYENRYELLDPISKHELNYQTGKRAILLTRYGKRGS RRYFLNNDISKRAIVLTRFG	
Signal Sequence: MMAKQFPYFIINLSIVLCLCFYIQFADQ	
Predicted Peptide(s): MPDQYENRYELLDPISKHELNYQTamide, MPDQYENRYELLDPISKHELNYQTG, AILLTRYamide , AILLTRYG , GS, YFLNNDIS , GSRRYFLNNDIS, AIVLTRFamide , AIVLTRFG	
Prohormone Cloning Method: EST PL06010A1H10, Contig7559	
Oligonucleotide Primer(s): N/A	
Asexual Expression Pattern: CG, VNC, pharynx, unidentified sub-epidermal cells at lateral margin	
Genbank accession: GU295187	

Gene Name: <i>Smed-neuropeptide precursor-4</i>	Abbreviation: <i>Smed-npp-4</i>
Prohormone Sequence: MNSLSITIFVLSILVSWAQSEQKRSSVFRFGKRDQSIDQLTDDSAFSNVPVESTRRNYEQLLSPYP ENDQDENKRSVAFRFGKRRGVAFRFGKRGSVFRYGKRQSVFRYG	
Signal Sequence: MNSLSITIFVLSILVSWAQS	
Predicted Peptide(s): EQ, SSVFRFamide , SSVFRFG , DQSIDQLTDDSAFSNVPVEST, NYEQLLSPYPENDQDEN, SVAFRFamide, SVAFRFG, RGVAFRFamide , RGVAFRFG , GSVFRYamide, GSVFRYG, QSVFRYamide, QSVFRYG,	
Prohormone Cloning Method: EST PI08007a2b03, Contig7622	
Oligonucleotide Primer(s): N/A	
Asexual Expression Pattern: CG, pharynx, unidentified sub-epidermal cells	
Genbank accession: BK007037	

Gene Name: <i>Smed-neuropeptide precursor-5</i>	Abbreviation: <i>Smed-npp-5</i>
Prohormone Sequence: MNLFLIGVIIVGVQVTVDAENSDLIDALKKRPNWKDMPWGKRSASWRDMPWGKRSASWRDMPWG KRSASWRDMPWGKRSASWRDMPWGKKSASWRDMPWGKRSDWKDISWEKKQGLHDLSLNNPF EK SLILNNSEFED	
Signal Sequence: MNLFLIGVIIVGVQVTVDA	
Predicted Peptide(s): ENSDLIDAL, PNWKDMPWamide , PNWKDMPWG, SAWRDMPWamide(x5) , SAWRDMPG(x5), SDWKDISWE, QGLHDLSLNNPF EKSLILNNSEFED	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): CGGAGTTATTATTGTTGGCGTTC(OUTER), AAAAAGGCCAAATTGGAAGG(INNER)	
Asexual Expression Pattern: CG, cells surrounding ventral midline	
Genbank accession: BK007015	

Gene Name: <i>Smed-neuropeptide precursor-8</i>	Abbreviation: <i>Smed-npp-8</i>
Prohormone Sequence: MKLVFMLLFSLNILILSNRWADGMMQDYLDRLKFLASKRLADKKDPRFSDQVWHSYGKRNYYN RFDGQAWYSGYGKRNDAFDGQAWYSGYGR	
Signal Sequence: MKLVFMLLFSLNILILSNRWADG	
Predicted Peptide(s): MMQDYLDRLKFLAS, LAD, DPRFSDQVWHSYGamide, DPRFSDQVWHSYG, NYYNRFDGQAWYSGYamide, NYYNRFDGQAWYSGYG, NDAFDGQAWYSGYamide, NDAFDGQAWYSGY	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): AAATCCAAATAAACACCTGACG (OUTER), TTCTAGCATCTAAAAGATTAGCAGACA (INNER)	
Asexual Expression Pattern: CG, VNC, pharynx (tip), intestine, unidentified sub-epidermal cells at lateral margin	
Genbank accession: GU295189	

Gene Name: <i>Smed-neuropeptide precursor-12</i>	Abbreviation: <i>Smed-npp-12</i>
Prohormone Sequence: MKLILLFILLVLCIVHSRYFQPQQDFPKSNIFQLPESEFENDDVIQKRNYFGKRNYFGKRNYFGKRN YFWKKKLFRLKIQTIN	
Signal Sequence: MKLILLFILLVLCIVHS	
Predicted Peptide(s): RYFQPQQDFPKSNIFQLPESEFENDDVIQ, NYFamide(x3), NYFG(x3), NYFW, LFRLKIQTIN	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): CAGATTTGTTTAAACAATGAAATTAA (OUTER)	
Asexual Expression Pattern: CG, cells near or in VNC, pharynx, cells at anterior margin, Photoreceptors	
Genbank accession: GU295182	

Gene Name: <i>Smed-neuropeptide precursor-18</i>	Abbreviation: <i>Smed-npp-18</i>
Prohormone Sequence: MELFSRTTVFFLIIFPIWMMSVILIEARNMDLDEYDSSLPKDKRGAEFFIRRVVGKRGAEFFIRRVVG KRNSDYLIQ	
Signal Sequence: MELFSRTTVFFLIIFPIWMMSVILIEA	
Predicted Peptide(s): RNMDLDEYDSSLPKD, GAEFFIRRVVamide (x2), GAEFFIRRVVG(x2), NSDYLIQ	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): TGGAATTTATCAGTAGAACTACAGTA (OUTER)	
Asexual Expression Pattern: unidentified sub-epidermal cells	
Genbank accession: BK007027	

Gene Name: <i>Smed-neuropeptide precursor-22</i>	Abbreviation: <i>Smed-npp-22</i>
Prohormone Sequence: MKTLSLCLSIGFSLVLIASLPFVSSTTDDEVNENICQSLCHKLSLCLDECHDISESNDSMEKRAKYF RLGKRAKYFRLGKRFSFDSSNLEKRAKYFRLG	
Signal Sequence: MKTLSLCLSIGFSLVLIASLPFVSS	
Predicted Peptide(s): TTDDEVNENICQSLCHKLSLCLDECHDISESNDSME, AKYFRLamide(x3), AKYFRLG(x3), SFDSSNLE	

Prohormone Cloning Method: EST PL05004B1G05, Contig1226
Oligonucleotide Primer(s): N/A
Asexual Expression Pattern: CG, VNC, pharynx, unidentified sub-epidermal cells, anterior concentration of cells outside CG
Genbank accession: BK007038

Gene Name: <i>Smed-neuropeptide y superfamily-1</i>	Abbreviation: <i>Smed-npy-1</i>
Prohormone Sequence: MTFIYGFLCLTLNVICSQKSLFIEPPAKPEFFDDPELLRNYIKKLNEYFAIVGRPRFGKRFDRGFS	
Signal Sequence: MTFIYGFLCLTLNVICS	
Predicted Peptide(s): QKSLFIEPPAKPEFFDDPELLRNYI, pEPPAKPEFFDDPELLRNYI, LNEYFAIVGRPRFamide ^s , LNEYFAIVGRPRFG, FDRGFS	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): ATGACTTTCATTTACGGATTTCTATG	
Asexual Expression Pattern: CG, VNC	
Genbank accession: GU295175	

Gene Name: <i>Smed-neuropeptide y superfamily-2</i>	Abbreviation: <i>Smed-npy-2</i>
Prohormone Sequence: MNFPIISIVALLTVFNCFSAMEDDTKSLAELKNLLSDLNEEYLIAGRPRFGKRNMIFKRSANPLKWM TL	
Signal Sequence: MNFPIISIVALLTVFNCFS	
Predicted Peptide(s): AMEDDTKSLAELKNLLSDLNEEYLIAGRPRFamide, AMEDDTKSLAELKNLLSDLNEEYLIAGRPRFG, NMIF, SANPLKWM TL	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): ATGAATTTCCCGATTATTTCTATTG	
Asexual Expression Pattern: CG, VNC	
Genbank accession: BK007019	

Gene Name: <i>Smed-neuropeptide y superfamily-3</i>	Abbreviation: <i>Smed-npy-3</i>
Prohormone Sequence: MSTKEFTFCFVMICALFCQIVQISANKDELDILFKKRNNNQLDDPDIQQYLQDLNMFYQFYGRPRFGKRQKFHRD	
Signal Sequence: MSTKEFTFCFVMICALFCQIVQISA	
Predicted Peptide(s): NKDELDILF, NNNQLDDPDIQQYLQDLNMFYQFYGRPRFamide, NNNQLDDPDIQQYLQDLNMFYQFYGRPRFG, QKFHRD, pQKFHRD	
Prohormone Cloning Method: Amplified from cDNA	
Oligonucleotide Primer(s): CATTATTTGCCAAATCGTTCA (Forward), CTGGATAAAGTAATATCATTATTTAA (Reverse)	
Asexual Expression Pattern: CG, VNC, unidentified sub-epidermal cells, pharynx, cells surrounding pharynx	
Genbank accession: BK007009	

Gene Name: <i>Smed-neuropeptide y superfamily-4</i>	Abbreviation: <i>Smed-npy-4</i>
Prohormone Sequence: MKFCCAPRLSVLFLAVFIFGISLTAKEVKRKRKVYVYLKSRNHFRSDEDYVSYLRKVQKYIQLYGRPRFGKRQTNWYDMKNYEGNENYDSYTF	

Signal Sequence: MKFCCAPRLSVLFLAVFIFGISLTA
Predicted Peptide(s): KEV, VVYLKSRNHFRSDEDYVSYLRKVQKYIQLYGRPRFamide, VVYLKSRNHFRSDEDYVSYLRKVQKYIQLYGRPRFG, QTNWYDMKNYEGNENYDSYTF
Prohormone Cloning Method: EST PL05016B2E03, Contig3649
Oligonucleotide Primer(s): N/A
Asexual Expression Pattern: unidentified sub-epidermal cells (ventral)
Genbank accession: BK007039

Gene Name: <i>Smed-neuropeptide y superfamily-5</i>	Abbreviation: <i>Smed-ntp-5</i>
Prohormone Sequence: MLIGYNCKSGIILLMAVLGAMWLSGIQTDDRVDIRKSIFSSPEALRRYLLQMNEYLAIVARPRYGKRS SLPIDMNRLQFDNYENYFK	
Signal Sequence: MLIGYNCKSGIILLMAVLGAMWLSGIQT	
Predicted Peptide(s): DDRVDIRKSIFSSPEAL, YLLQMNEYLAIVARPRYamide ^o , YLLQMNEYLAIVARPRYG ^o , SLPIDMNRLQFDNYENYF	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): TTGATCGGGTATAACTGTAAAAGC	
Asexual Expression Pattern: CG, VNC, pharynx (distal region), lateral stripes of cells (ventral)	
Genbank accession: BK007008	

Gene Name: <i>Smed-neuropeptide y superfamily-6</i>	Abbreviation: <i>Smed-ntp-6</i>
Prohormone Sequence: MYGFSHSALKIILILISISSLSTFSSDPVIDFDLEKDKDLMKYMQDLNNYSQLYGRPRFGKRSLNSF QTIREFVRDRRLW	
Signal Sequence: MYGFSHSALKIILILISISSL	
Predicted Peptide(s): ILSTFSSDPVIDFDLEKDKDLMKYMQDLNNYSQLYGRPRFamide, ILSTFSSDPVIDFDLEKDKDLMKYMQDLNNYSQLYGRPRFG, SLNSFQTIREFVRD, LW	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): TATGGGTTTTTCGCATTCTGC	
Asexual Expression Pattern: CG, cells anterior to CG, pharynx (inner ring), VNCs	
Genbank accession: BK007031	

Gene Name: <i>Smed-neuropeptide y superfamily-7</i>	Abbreviation: <i>Smed-ntp-7</i>
Prohormone Sequence: MFERIRNSIFLLFISLNWCEAQYPIFGKMLDSIPFKSRTPIAGIVNKMGGQIRKLSEREIKLLVYLLNEH FAIYGRPRYG	
Signal Sequence: MFERIRNSIFLLFISLNWCEA	
Predicted Peptide(s): QYPIFGKMLDSIPFKSRTPIAGIVNKMGGQIRKLSEREI ^s , LLVYLLNEHFAIYGRPRYamide, LLVYLLNEHFAIYGRPRYG	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): GTTTGAGAGAATTAGGAATTCG (OUTER), AGGAATTCGATATTTCTTCTTTTCA (INNER)	
Asexual Expression Pattern: CG, VNC, pharynx, unidentified Sub-epidermal cells	
Genbank accession: BK007020	

Gene Name: <i>Smed-neuropeptide y superfamily-8</i>	Abbreviation: <i>Smed-npy-8</i>
Prohormone Sequence: MIINKCYFLVFILCFMSFIHLNTCNQKRPMFDSADAFRNYLRKLNNEYMIAGRPRFGKRRSDFEKEL FYNLKSNL	
Signal Sequence: MIINKCYFLVFILCFMSFIHLNTC	
Predicted Peptide(s): PMFDSADAFRNYLRKLNNEYMIAGRPRFamide, PMFDSADAFRNYLRKLNNEYMIAGRPRFG, RSDFEKELFYNLKSNL	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): TCATTAACAAATGCTATTTTCTCG (OUTER), CAATCAGAAAAGGCCGATGT (INNER)	
Asexual Expression Pattern: None	
Genbank accession: BK007010	

Gene Name: <i>Smed-neuropeptide y superfamily-9</i>	Abbreviation: <i>Smed-npy-9</i>
Prohormone Sequence: MYFLQKFFILSISLTLCVICFNRNVSGLTKQKYSLSFGPEDLRNYLRQLNEYIALSSRPRYGKRNEW TSISE	
Signal Sequence: MYFLQKFFILSISLTLCVICFNRNVSG	
Predicted Peptide(s): LTKQK YSLFSGPE DLRNYLRQLNEYIALSSRPRYamide, LTKQK YSLFSGPE DLRNYLRQLNEYIALSSRPRYG, NEWTSISE, pEWTSISE ^s	
Prohormone Cloning Method: EST PL04007A1D04	
Oligonucleotide Primer(s): N/A	
Asexual Expression Pattern: CG, VNC, unidentified sub-epidermal cells, pharynx	
Genbank accession: BK007040	

Gene Name: <i>Smed-neuropeptide y superfamily-10</i>	Abbreviation: <i>Smed-npy-10</i>
Prohormone Sequence: MNISRFLKVFVIFILFQNICTLSDYETSSFNQWYDKRDLKPLFNNAKQLLWYLQKLDKMYAIAGRPR YGKR	
Signal Sequence: MNISRFLKVFVIFILFQNICT	
Predicted Peptide(s): LSDYETSSFNQWYD, DLKPLFNNAKQLLWYLQKLDK MYAIAGR PRYamide, DLKPLFNNAKQLLWYLQKLDK MYAIAGR PRYG	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): CAAATATTTGCACGTTGAGTGA (OUTER), TGCACGTTGAGTGATTATGAAA (INNER)	
Asexual Expression Pattern: CG, VNC, intestine	
Genbank accession: BK007011	

Gene Name: <i>Smed-neuropeptide y superfamily-11</i>	Abbreviation: <i>Smed-npy-11</i>
Prohormone Sequence: MLIPCLLGALIFAIQDSHCYFIMPSNSMDPNKPPIPLNSHATSDEIKDYLLHHLNLYFQIVSRPRLGKR QKYDFHDILNQF	
Signal Sequence: MLIPCLLGALIFAIQDSHC	
Predicted Peptide(s): YFIMPSNSMDPNKPPIPLNSHATSDEIKDYLLHHLNLYFQIVSRPRLamide, YFIMPSNSMDPNKPPIPLNSHATSDEIKDYLLHHLNLYFQIVSRPRLG, QKYDFHDILNQF	

Prohormone Cloning Method: 3' RACE
Oligonucleotide Primer(s): TGTTGATTCCATGCTTATTAGGTG (OUTER), TTCCATGCTTATTAGGTGCATT (INNER)
Asexual Expression Pattern: pharynx (distal tip)
Genbank accession: BK007021

Gene Name: <i>Smed-pyrokinin prohormone like-1</i>	Abbreviation: <i>Smed-ppl-1</i>
Prohormone Sequence: MKFSRICFIILVSLELFVVNEAVHMSDQLVFSLLVLIANHEINSKNFIYIPDDSFINEMDRAIDKKIFSP RMGKRYFSPRMGKRYFSPRMGKRYFSPRMGKRYFSPRLGK	
Signal Sequence: MKFSRICFIILVSLELFVVNEA	
Predicted Peptide(s): VHMSDQLVFSLLVLIANHEINSKNFIYIPDDSFINEMDRAID, IFSPRMamide, IFSPRMG, YFSPRMamide (x3), YFSPRMG(x3), YFSPRLamide, YFSPRLG	
Prohormone Cloning Method: Amplification from cDNA	
Oligonucleotide Primer(s): TGAAATTCAGCAGGATTTGTTT (Forward), TTATGAAGCACTTTATGTTCATTTACC (Reverse)	
Asexual Expression Pattern: CG, pharynx(tip), occasional cells labeled near VNC's	
Genbank accession: BK007007	

Gene Name: <i>Smed-pedal peptide prohormone like-1</i>	Abbreviation: <i>Smed-ppp-1</i>
Prohormone Sequence: MKSTGLLILTFVLVSVEFGDFYRVSSSDLRRFVKKYSYDSIGSGLLKRGAYYDPIGGLLKRSSYY DPIGGLLKRDSNYDPIGGLLKRRSFYDPIGGLLKRRSFYDPIGGLLKRRSFYDPIGGLLKK RFYNDPLGVALLKSRFDKDSIN	
Signal Sequence: MKSTGLLILTFVLVSVEFG	
Predicted Peptide(s): DFYRVSSDLRRF, YSYYDSIGSGLL, GAYYDPIGGLL, SSYYDPIGGLL, DSNYDPIGGLL, RSFYDPIGGLL (x3), RFYNDPLGVALLKSRFDKDSIN	
Prohormone Cloning Method: EST PL05001A2A04, Contig128	
Oligonucleotide Primer(s): N/A	
Asexual Expression Pattern: CG, VNC, pharynx (inner ring), unidentified sub-epidermal cells	
Genbank accession: BK007041	

Gene Name: <i>Smed-pedal peptide prohormone like-2</i>	Abbreviation: <i>Smed-ppp-2</i>
Prohormone Sequence: MTVNGILISSMMITIILSTVDLSKSRHEGEIKRFRYFDKIGSDLLKRSYFDKIGNDLLKRSYMDKIGSD LLKRRYFDKIGSEMLKRSYMDKIGSDL	
Signal Sequence: MTVNGILISSMMITIILS	
Predicted Peptide(s): TVDLSKSRHEGEI, FRYFDKIGSDLL, SYFDKIGNDLL, SYMDKIGSDLL, RYFDKIGSEML, SYMDKIGSDL	
Prohormone Cloning Method: Amplified from cDNA	
Oligonucleotide Primer(s): TATAATGACAGTCAACGGTATTTTAT (F), GATTTCTACAACAAATCGCTTCC (R)	
Asexual Expression Pattern: CG, VNC, pharynx, unidentified sub-epidermal cells	
Genbank accession: BK007018	

Gene Name: <i>Smed-secreted peptide prohormone-1</i>	Abbreviation: <i>Smed-spp-1</i>
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Prohormone Sequence (two splice variants): SMED-SPP-1A MTMNKLTILFSLFSLVSVFVARSNASAFSSPGNSGAMILLTSGCLFMNTFAEDLGSLNADIDLDDSRDL KKAYWASRMGKRAYWASRMGKKAYWASRMGK SMED-SPP-1B MILLTSGCLFMNTFAEDLGSLNADIDLDDSRDLKKAYWASRMGKRAYWASRMGKKAYWASRMG K
Signal Sequence: MTMNKLTILFSLFSLVSVFVARNA (SMED-SPP-1A) MILLTSGCLFMNTFA (SMED-SPP-1B)
Predicted Peptide(s): SAFSSPGNSGAMILLTSGCLFMNTFAEDLGSLNADIDLDDSRDL, EDLGSLNADIDLDDSRDL, AYWASRMamide (x3), AYWASRMG (x3)
Prohormone Cloning Method: Amplified from cDNA
Oligonucleotide Primer(s): GACAGAAAATATGACAATGAACAA (F), TCATATTAATCAAACGCAAATAACA (R)
Asexual Expression Pattern: CG, VNC, pharynx
Genbank accession: GU295176

Gene Name: <i>Smed-secreted peptide prohormone-2</i>	Abbreviation: <i>Smed-spp-2</i>
Prohormone Sequence: MAIKILYSFLSILFCISVQGEFYQNFADSNPCDELCEPQNLCDKLCSSYQNSDFEHEDAKRAVFLR LGRNIKRAPFLRLGRSQKKSFLRLGK	
Signal Sequence: MAIKILYSFLSILFCISVQG	
Predicted Peptide(s): EFYQNFADSNPCDELCEPQNLCDKLCSSYQNSDFEHEDA, AVFLRLamide, AVFLRLG, NI, APFLRLamide, APFLRLG, SQQ, SKFLRLamide, SKFLRLG	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): GGCAATCAAATTTTGTATTCTTTTC	
Asexual Expression Pattern: CG (concentration of cells in medial domain)	
Genbank accession: BK007032	

Gene Name: <i>Smed-secreted peptide prohormone-3</i>	Abbreviation: <i>Smed-spp-3</i>
Prohormone Sequence: MYYFKIILLISFICIQQEFIFSSVMDDLKDETYLSKRRYSLINPRLGKRYLINPRLGKRFQIKDIENLD	
Signal Sequence: MYYFKIILLISFICIQQEFIFS	
Predicted Peptide(s): SVMDDLKDETYLS, RYSLINPRLamide, RYSLINPRLG, YLINPRLamide, YLINPRLG, FQIKDIENLD	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): GTATTACTTTAAATTATATTACTAATAAG	
Asexual Expression Pattern: CG (concentration of cells in medial and lateral regions of CG), VNC, pharynx	
Genbank accession: BK007022	

Gene Name: <i>Smed-secreted peptide prohormone-4</i>	Abbreviation: <i>Smed-spp-4</i>
Prohormone Sequence: MFYKFILLSVIMIFITKIEADYSSLNDDSELEDSYHRYPSSIKRGLRLMRLGKRNMNDEFQFRDLKK RGLRLMRLG	
Signal Sequence: MFYKFILLSVIMIFITKIEA	
Predicted Peptide(s): DYSSLNDDSELEDSYHRYPSSI, GLRLMRLamide (x2), GLRLMRLG (x2),	

NMNDEFQFRDL
Prohormone Cloning Method: 3' RACE
Oligonucleotide Primer(s): CATCTAACATGTTTTACAAATTTATT
Asexual Expression Pattern: unidentified sub-epidermal cells, CG, Pharynx
Genbank accession: GU295179

Gene Name: <i>Smed-secreted peptide prohormone-5</i>	Abbreviation: <i>Smed-spp-5</i>
Prohormone Sequence: MKVLLFIVLCVVFVFALDDPEDSLNYYSNYSPAERSELVSKRGLRILRMGKRNDLFRLLDKRGMR HMRLG	
Signal Sequence: MKVLLFIVLCVVFVFA	
Predicted Peptide(s): LDDPEDSLNYYSNYSPAERSELVS, GLRILRMamide , GLRILRMG , NDLFRLLD , GMRHMRLamide, GMRHMRLG	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): TTTTCCCAAGACAAAATGAAA (OUTER), CCCAAGACAAAATGAAAGTGC (INNER)	
Asexual Expression Pattern: CG, VNC, Pharynx, unidentified sub-epidermal cells	
Genbank accession: GU295188	

Gene Name: <i>Smed-secreted peptide prohormone-6</i>	Abbreviation: <i>Smed-spp-6</i>
Prohormone Sequence: MIKIRILMSVLLFMAICLAAGLAEIDKRIPGIGFNRNFAIYKRMLEKRLIDPMTFGYGFSNLK	
Signal Sequence: MIKIRILMSVLLFMAICLAAGLA	
Predicted Peptide(s): EID, IPGIGFNRNFAIY , MLE, LIDPMTFGYGFSNL	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): ATCAACATGATCAAGATCAGAATTT	
Asexual Expression Pattern: unidentified cells between VNC in anterior half of animals, cells surrounding pharynx, cells at medial CG	
Genbank accession: GU295177	

Gene Name: <i>Smed-secreted peptide prohormone-7</i>	Abbreviation: <i>Smed-spp-7</i>
Prohormone Sequence: MKFIISLFFVFLFCVVMAMSEIDKRTVGFGFNRNLHLYKRMLEKRLIDPMTFGSGFANLK	
Signal Sequence: MKFIISLFFVFLFCVVMAMS	
Predicted Peptide(s): EID, TVGFGFNRNLHLY , MLE, LIDPMTFGSGFANL	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): ATGAAATTTATCATTTCCTTATTTGTC	
Asexual Expression Pattern: unidentified cells between VNC in anterior half of animals, cells surrounding pharynx	
Genbank accession: GU295178	

Gene Name: <i>Smed-secreted peptide prohormone-8</i>	Abbreviation: <i>Smed-spp-8</i>
Prohormone Sequence: MKIILLAILAVCAFEALGEVEKRTMGFGFNRNMLLYKRMLEKRLIDPMTFGSGFANLR	
Signal Sequence: MKIILLAILAVCAFEALG	
Predicted Peptide(s): EVE, TMGFGFNRNMLLY , MLE, LIDPMTFGSGFANL	

Prohormone Cloning Method: 3' RACE
Oligonucleotide Primer(s): CATGAAAATTATTATTTTACTAGCTAT
Asexual Expression Pattern: unidentified cells between VNC in anterior half of animals, cells surrounding pharynx
Genbank accession: GU295181

Gene Name: <i>Smed-secreted peptide prohormone-9</i>	Abbreviation: <i>Smed-spp-9</i>
Prohormone Sequence: MNSLIILLIVALVCLANVCCGVQKRSLPYNPEYELYKRFVEKRLIDPLTFGSGFSNL	
Signal Sequence: MNSLIILLIVALVC	
Predicted Peptide(s): LANVCCGVQ ^s , SLPYNPEYELY, FVE, LIDPLTFGSGFSNL	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): TGAATTCGTTGATTATTTTACTTATCG	
Asexual Expression Pattern: unidentified cells between VNC in anterior half of animals, cells surrounding pharynx, cells scattered in CG	
Genbank accession: BK007026	

Gene Name: <i>Smed-secreted peptide prohormone-10</i>	Abbreviation: <i>Smed-spp-10</i>
Prohormone Sequence: MNFQSKIIMIMCHFVITVFNEPLSKYYPDNNEDLSATIKRGAEFFLQRVEGKRGAEFFLRRVVGKR STKPIDPNQYPLVYGE	
Signal Sequence: MNFQSKIIMIMCHFVITVFN	
Predicted Peptide(s): EPLSKYYPDNNEDLSATI, GAEFFLQRVEamide, GAEFFLQRVEG, GAEFFLRRVamide, GAEFFLRRVVG, STKPIDPNQYPLVYGE	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): GATAATGTGCCACTTTGTTATAACAG	
Asexual Expression Pattern: CG, and unidentified cells between VNC in anterior half of animal	
Genbank accession: BK007028	

Gene Name: <i>Smed-secreted peptide prohormone-11</i>	Abbreviation: <i>Smed-spp-11</i>
Prohormone Sequence: MKLLFVAALFLVIMDVYAIQEKRYIRFGKRHQQLFPNKRYIRFGKREYIPLDKRNDLLDSEFLNDMN ENLEKRYIRFGR	
Signal Sequence: MKLLFVAALFLVIMDVYA	
Predicted Peptide(s): IQE, YIRFamide (x3), YIRFG (x3), HQQLFPN, EYIPLD, NDLLDSEFLNDMNENLE	
Prohormone Cloning Method: Amplified from cDNA	
Oligonucleotide Primer(s): GAACTTTTATTCGTTGCTGCAT(Forward), AAAACACTCGAAATCATCGTC (Reverse)	
Asexual Expression Pattern: CG, VNC, pharynx	
Genbank accession: BK007014	

Gene Name: <i>Smed-secreted peptide prohormone-12</i>	Abbreviation: <i>Smed-spp-12</i>
Prohormone Sequence: MQLLLILMLTYTFYSVHEATPAMRSDKLDREDWYGPFKRNYMDFFGLNQDMQRFKKQQFFRNH RPEIEWN	

Signal Sequence: MQLLLILMLTYTFYSVH
Predicted Peptide(s): EATPAMRSD ^s , LDREDWYGPF, NYMDFFGLNQDMQRF, QQFFRNHRPEIENW, pQQFFRNHRPEIENW.
Prohormone Cloning Method: 3' RACE
Oligonucleotide Primer(s): TGCAATTACTTCTAATACTTATGCTGA (OUTER), TGACGTATACCTTTTACTCCGTTT(INNER)
Asexual Expression Pattern: CG, VNC, Cells anterior to CG, unidentified sub-epidermal cells, pharynx
Genbank accession: BK007023

Gene Name: <i>Smed-secreted peptide prohormone-13</i>	Abbreviation: <i>Smed-spp-13</i>
Prohormone Sequence: MKFTIYTVLTATLWIFLVQTEEAIEIPQKDFLQNYDLIPNYEQRIEDSWRDPDRIRLMKKFRGLLGKR VHAKRFRGLLG	
Signal Sequence: MKFTIYTVLTATLWIFLVQTEEA	
Predicted Peptide(s): EIPQKDFLQNYDLIPNYEQRIEDSWRDPDRIRLM, FRGLLamide(x2), FRGLLG(x2), VHA	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): ATGAAATTTACAATTTACACCGTTCTG (OUTER), CAATTTACACCGTTCTGACAGCAAC (INNER)	
Asexual Expression Pattern: CG, VNC, unidentified sub-epidermal cells, pharynx, semi-circular ring of cells anterior to CG, anterior margin	
Genbank accession: BK007029	

Gene Name: <i>Smed-secreted peptide prohormone-14</i>	Abbreviation: <i>Smed-spp-14</i>
Prohormone Sequence: MKLTYTLSIIYFVTFTLCNSYDYDTKISNKRPYNGKRNGLDIDDLFMGKRTYLGKRTYLGKRTYLGK RLDHSISRLLPQAFANTKYQLYRNQ	
Signal Sequence: MKLTYTLSIIYFVTFTLC	
Predicted Peptide(s): NSYDYDTKISN, PYNamide, PYNG, NGLDIDDLFMamide, NGLDIDDLFMG, TYLamide (x3), TYLG(x3), LDHSISRLLPQAFANTKYQLYRNQ	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): ATGAAGCTGACTTATACTCTT (OUTER), AGCTGACTTATACTCTTAGTATCA (INNER)	
Asexual Expression Pattern: CG, VNC (single line of cells)	
Genbank accession: BK007030	

Gene Name: <i>Smed-secreted peptide prohormone-15</i>	Abbreviation: <i>Smed-spp-15</i>
Prohormone Sequence: MQFRFSKMTHVTLITVGLFHVISGYYPQTYELNQSDRGYYPILFDKRFDPPIQFGKRFDPPIQFGKRFDP PIQFGKRFDPPIQFGKRFDPPIQFGKRFDPPIQFGKRFDPPIQFGKRFDPPIQFGKRFDPIMFGR	
Signal Sequence: MQFRFSKMTHVTLITVGLFHVISG	
Predicted Peptide(s): YPQTYELNQSDRGYYPILFD, FDPIQFamide (x8), FDPIQFG (x8), FDPIMFamide ^s , FDPIMFG	
Prohormone Cloning Method: Amplified from cDNA	
Oligonucleotide Primer(s): TGCAATTTAGATTTTCAAAGATGA (Forward), TCTGCCAAACATTATTGGATCA (Reverse)	
Asexual Expression Pattern: CG, VNC, unidentified sub-epidermal cells, pharynx	

Genbank accession: BK007013

Gene Name: <i>Smed-secreted peptide prohormone-16</i>	Abbreviation: <i>Smed-spp-16</i>
Prohormone Sequence: MKIYILCLSLFFLQQLSVTRSFPSSNEIYKRQFDPIMYGKLRQFYRRSSKIGKGQFDPTMYEKSIFA KRQFDPIMYKRQSNPYFLSDIRSIKRQFDPIMY	
Signal Sequence: MKIYILCLSLFFLQQLSVTRS	
Predicted Peptide(s): FPSSNEIY, QFDPIMYGKLRQFY, pQFDPIMYGKLRQFY, QFDPIYamide ^s , SS, IGKGQFDPTMYEKSIFA, QFDPIMY(x2), pQFDPIMY(x2), QSNPYFLSDIRSI, pQSNPYFLSDIRSI	
Prohormone Cloning Method: EST PL05004A1G02, Contig1470	
Oligonucleotide Primer(s): N/A	
Asexual Expression Pattern: CG, VNC, pharynx, unidentified sub-epidermal cells, anterior concentration of cells outside CG	
Genbank accession: BK007042	

Gene Name: <i>Smed-secreted peptide prohormone-17</i>	Abbreviation: <i>Smed-spp-17</i>
Prohormone Sequence: MNKVIVLLLFLFIASFSETPFKRYIQDPDENDTLRDFYLQNRMENSKSKKIIDPMTYGTGFSNL	
Signal Sequence: MNKVIVLLLFLFIASF	
Predicted Peptide(s): SETPF, YIQDPDENDTLRDFYLQNRMENSKS, IIDPMTYGTGFSNL	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): AAATGAATAAAGTAATTGTTTTACTCC (Outer)	
Asexual Expression Pattern: CG, VNC, pharynx, unidentified sub-epidermal cells, unidentified cells between VNC in anterior half of animals, cells surrounding pharynx	
Genbank accession: GU295183	

Gene Name: <i>Smed-secreted peptide prohormone-18</i>	Abbreviation: <i>Smed-spp-18</i>
Prohormone Sequence: MKSGALTVVGFCLISYCMSAIPEDYEKRGYHFFRLKKSGDCVIPDVMKAMIETKIQNHEQLCAADK KFIEMISSV	
Signal Sequence: MKSGALTVVGFCLISYCMS	
Predicted Peptide(s): AIPEDYE, GYHFFRL, SGDCVIPDVMKAMIETKIQNHEQLCAAD, FIEMISSV	
Prohormone Cloning Method: 3' RACE	
Oligonucleotide Primer(s): ATGAAGAGCGGAGCATTA ACT (Outer)	
Asexual Expression Pattern: CG, unidentified sub-epidermal cells	
Genbank accession: GU295184	

Gene Name: <i>Smed-secreted peptide prohormone-19</i>	Abbreviation: <i>Smed-spp-19</i>
Prohormone Sequence: MNGTVILCTLIVLLASFPSDGSDDLIVKRKHIGHQIFRLKRGYHFFRLRKDEKCLIPGELKSAIKNDLE SGSNLCGSDKSFLAELASLL	
Signal Sequence: MNGTVILCTLIVLLASFPSDG	
Predicted Peptide(s): SDDLIV, KHIGHQIFRL, GYHFFRL, DEKCLIPGELKSAIKNDLESGSNLCGSDKSFLAELASLL	
Prohormone Cloning Method: 3' RACE	

Oligonucleotide Primer(s): ATGAATGGAACGGTTATACTTTGC (Outer)
Asexual Expression Pattern: CG, VNC, unidentified sub-epidermal cells
Genbank accession: GU295186

Peptides confirmed by MS/MS sequencing are colored red and peptides detected by mass match are shaded. Peptides marked with § were identified with lower confidence, and peptides labeled with Φ are tentative, because their corresponding prohormone identification do not meet the criteria as described in experimental section.